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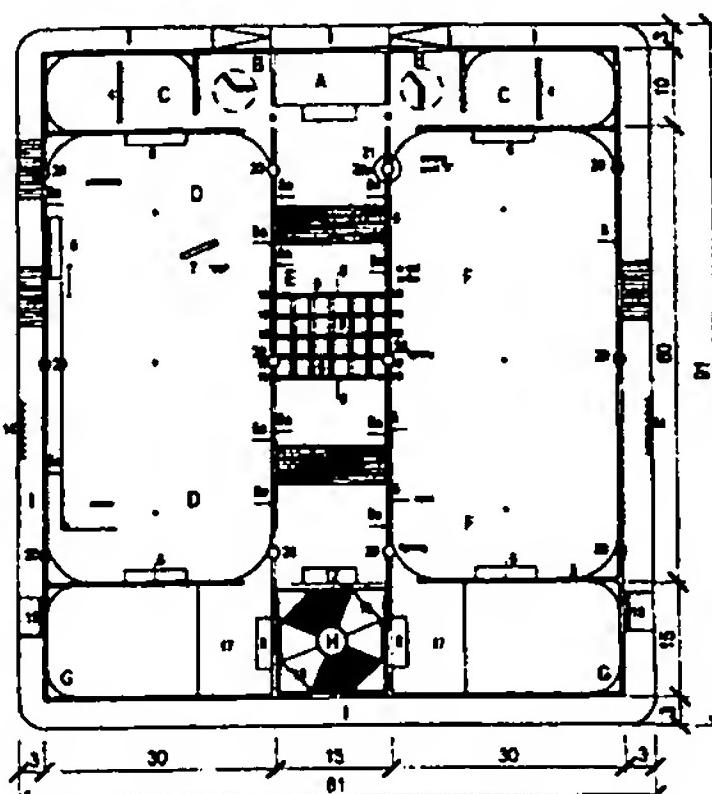
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(54) Title: POLYGON FOR FOOTBALL PLAYERS TRAINING "FOOTBALL SCHOOL"

THE BASE OF THE TRAINING POLYGON

1. A. FITNESS, WEIGHTLIFTING ROOM, LOCKER ROOM, EQUIPMENT PANTRY - CLUB
2. B. ROTATING OBSTACLES, JUMPING - HANGING BALLS
3. C. VALLEY BALL (GAME BY FEET) 20x10 m²
4. D. SMALL FOOTBALL - FREE KICKS 80x20 m²
5. E. DRIBBLING - PRECISION - TECHNIQUE 80x15 m²
6. F. SMALL FOOTBALL 80x20 m²
7. G. GOALKEEPER TRAINING 30x13 m²
8. H. SHOOTING BOX 10x13.5 m²
9. I. MARKING 32x60 m²



WO 01/24883 A2

(57) Abstract: The essence of the "POLYGON FOR FOOTBALL PLAYERS TRAINING - FOOTBALL SCHOOL" is to improve the conditions for training of the football players of all categories, which with an area disposition of imperative facilities and the earlier given devices, upgrades highly the education, particularly of the youngest trainees. Respecting the requirements of the training process all given elements and segments have their function, and when connected into technical/technological unity, enable supreme and indispensable exercises of football game, as follows: acquiring condition and skillfulness (segment "I"-14-15-19); exercising basic elements of jumping, techniques and all kinds of hits (segment "B, C, H") Drawing no. 4 - Drawing no. 8; an area for training of the goal keeper (segment "G"); exercising of free kicks (corners, sixteen meter kicks, penalty kicks (segment "D")); exercising dribbling (9), double pass (5-5a), reaction speed (11), precision (16), (segment "E"- Drawing no. 5, Drawing no. 6, Drawing no. 7); collective coordination in the attack and defence phase, as well as in a game on two goals (segment "F"). Construction of multi-purpose business building of approx 7.400 m² within the same location and area is connected with training polygon by economic reasons as well, thus making the total investment rational, profitable and attractive.

POLYGON FOR FOOTBALL PLAYERS TRAINING “FOOTBALL SCHOOL”

5 1. TECHNICAL FIELD

This invention relates to improving conditions for training process of all categories of football players, particularly, as extraordinary base for organizing the “Football School” for the youngest trainees.

One of the fundamental problems of the training process for the football players of all ages is the lack of necessary contents and auxiliaries rationally incorporated into a unique football training system, that make the training interesting and at the same time significantly effect individual improving of technical capabilities, jumping, precision, speed of reaction and condition, as well as following and control of work of each football player.

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2. BACKGROUND ART

The technical solutions and their connection into a unique training system process known until today, have mainly been directed to football fields of competing dimensions, which has considerably decreased time for direct contact with the ball, and individual improving of technical qualities, thus hampering the coach to follow and see the shortcomings of each football player.

3. DISCLOSURE OF THE INVENTION

25 The primary goal of the invention is the optimal rationalization and improving attractiveness of the training process, with special emphasis on the “FOOTBALL SCHOOL” along with application of specific exercising equipment for jumping, head hitting, dribbling, precision, speed, skillfulness, as well as expert control from one place along with surveillance of all 30 segments of the training polygon by TV cameras.

The base of the training polygon can be of sand or artificial grass which would enable functioning of the polygon 10-12 hours a day, but with making eaves in certain segments, the use would be possible during the whole year 35 and it would not depend on weather conditions. Besides space for locker room and administration, “FITNESS CLUB” is foreseen, as well as classrooms for theoretic work and education of all users of the “Football School” (foreign language, computers, education of well behaving), small ambulance and separate restaurant area, or covered terrace overlooking all polygon segments.

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TRAINING POLYGON has 12 segments dictated by requirements for supreme shaping of football players and football game as a whole, with particular accent on individual technical advance training of individuals and

collective (team) coordination in the attack and defense phase. The capacity of training polygon is 50 – 60 football players simultaneously. Each segment has its own basic function and certain capacity that provides for an individual to have a direct and continuous contact with the ball, without idle speed.

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1. CENTRAL BUILDING >>A<<, with administration (20 m^2), locker room (2×40 seats 60 m^2), sanitary area ($4\text{ WC }10\text{ m}^2$), showers (20 showers 30 m^2), wash basins (4 pcs), ambulance (20 m^2), fitness club (80 m^2), class room (50 m^2), total approx. $300,00\text{ m}^2$, and restaurant area overlooking the entire training polygon.

2-3 ROTATING OBSTACLES >>B<<, with hanging balls 1, flexible obstacles 2 with possibility to control rotation speed, height of the obstacles and hanging balls 3, simultaneous users $2 \times 2 = 4$ users, dimension (10×8) x $2 = 160\text{ m}^2$

4-5 “VOLLEYBALL” “C”, game player by feet over net 4 whose height can be regulated (2×2)x $2 = 8$ users, dimension $20 \times 10\text{ m} \times 2 = 400,00\text{ m}^2$

20 6. SEGMENT “D”, dimension $60,00 \times 30,00\text{ m}$, with peripheral wall 5 and easy to dismantle relief 5a for exercising double pass, movable goals 6, “live” wall 7, marking for corner kicks (match dimensions), left-right (with movable goals) 6, exercising penalty kicks and free kicks from different positions including placing movable “human barrier” 7, capacity: 8-10 users at the same time.

30 7. SEGMENT “E”, $60,00 \times 50,00\text{ m}$ ($900,00\text{ m}^2$), with grid construction 8 to mount hanging movable obstacles 9 with possibility to control speed rotation 10 , wall 5 height 140 cm with easy to dismantle relief 5a for exercising double pass, a shooting zone area 11 and goals 12 with spots that have individual lighting according to coach demands 16 and which represent the target a football player should hit in the zone 12a. Lighting spots are covered by net to prevent their damage 13. Capacity: 4-6 users at the same time.

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8. SEGMENT “F”, dimension $60,00 \times 30,00\text{ m}$ ($1.800,00\text{ m}^2$) with goals 6 and wall 5 allows game on two goals, capacity (2×7) 14 football players at the same time.

40 9-10. SEGMENT “G”, dimension $30,00 \times 15,00\text{ m}$ ($450,00 \times 2 = 900,00\text{ m}^2$) allows training for goal keeper 17 as well as exercising penalty kicks, goal keeper area $15,00 \times 8,00\text{ m}$ (disregarding the final base coating of the training polygon which is foreseen to be of “artificial” grass) is made of a mixture of

sand 80% and sawdust 20%. Capacity of this segment is 2-4 football players.

5 11. SEGMENT "H", "Shooting box" 15 x 15 x 5 m (225,00 m²) is closed by net from sides and above **18** preventing passing of a ball outside bounded area. The net is stretched and allows bouncing of the ball without decreasing the speed and serves for training of all types of hits, receiving the ball on the head, chest or foot.

Capacity of this segment is 4 football players.

10 12. SEGMENT "I", of dimension dictated by configuration of the field, selected by the investor including capacities of accompanying facilities should be at least 300 m long and 3 m wide with a possibility for placing different obstacles **14-15-19** (stall bar, posts, climbers-Tarzan gym) for acquiring condition and skillfulness.

15 Capacity of this segment is 10-12 users at the same time, but in case of warming up, the capacity is 50-60 users.

20 - Depending of the field configuration, the location, its attractiveness and available infrastructure, the training polygon can also be made on reinforced concrete structure in the aim to use 6-7.000 m² for a number of purposes (sale and servicing sports equipment, parking, trade and similar) **22** but without collision with the fundamental function of the twelve segments of the training polygon, which, from the aspect of construction, maintenance and attraction of the building and location, is rational and profitable.

25 The training polygon is equipped with TV cameras for overlooking the work in each segment, corresponding reflector lighting features **20** and laud speakers, as well as control platform **21** located on reflector tower **20a** with a possibility of visual control over all segments and devices.

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4. BRIEF DESCRIPTION OF DRAWINGS

The enclosed drawings are integral part of the textual description of the patent and allow assessment of its basic principles and technical-technologic essence of the training polygon.

Drawing no.1. is the base of the training polygon

Drawing no.2. is the base of the business area under the training polygon

Drawing no.3. is the cross-section of the training polygon

Drawing no.4. is detail of rotating obstacles and hanging balls

Drawing no.5. is detail hanging movable obstacles

Drawing no.6. is detail of a goal with lighted spots

Drawing no.7. is detail of wall with "relief"

Drawing no.8. is detail of shooting box for exercising with a ball

5. DETAILED DESCRIPTION OF THE INVENTION

THE TRAINING POLYGON with an accent on the "FOOTBALL SCHOOL" presents an innovation in this field and contributes to development and popularization of the football games. The twelve segments in the area of 7.400,00 m² can be used for multipurpose, depending on: the climate conditions, ground configuration, present infrastructure, town planning regulations, legal regulations in force, financial abilities of the investor and the user. With common involving of the state, commune (municipality), the club and individuals, as well as investor, the training polygon will contribute to development and education of youth from the age of 6 to 12.

6. INDUSTRIAL APPLICABILITY

By realization of the TRAINING POLYGON, with an accent on the "FOOTBALL SCHOOL, which is the SUBJECT OF PROTECTION, creates supreme conditions for the training process, rational use of an area for multi-purposes and particularly, profitable business operation that enables return of the invested funds in 2-3 years time.

Every location is specific and has specific investor requirements that can be incorporated with all essential elements and the essence of the patent into a unique, functional and profitable project.

CLAIMS

1. Polygon for football players training- Football School, **characterized by**, consists of 12 segments dictated by requirements of the supreme world football players and football game, as a whole, and with its facilities and total area of 7.400 m², enables individual and technical development of an individual and collective (team) coordination in the attack and defense phase.
- 10 2.Polygon for football players training-Football School, according to request 1., **characterized by**, consists of CENTRAL BUILDING "A", which besides the basic function connected to sports activities, also has facilities for education of trainees "Football School" which, besides specific sports activities, has a goal to establish positive personalities.
- 15 3. Polygon for football players training-Football School, according to request 1., **characterized by**, consists of segments "B, C, D, E, F, G, H, I", which besides corresponding accessories and constant control by TV cameras of each part of the training polygon and work of individuals, enable rational and efficient acquiring of the basic technical and condition values serving as base for collective coordination and fulfilling the basic football game principles.

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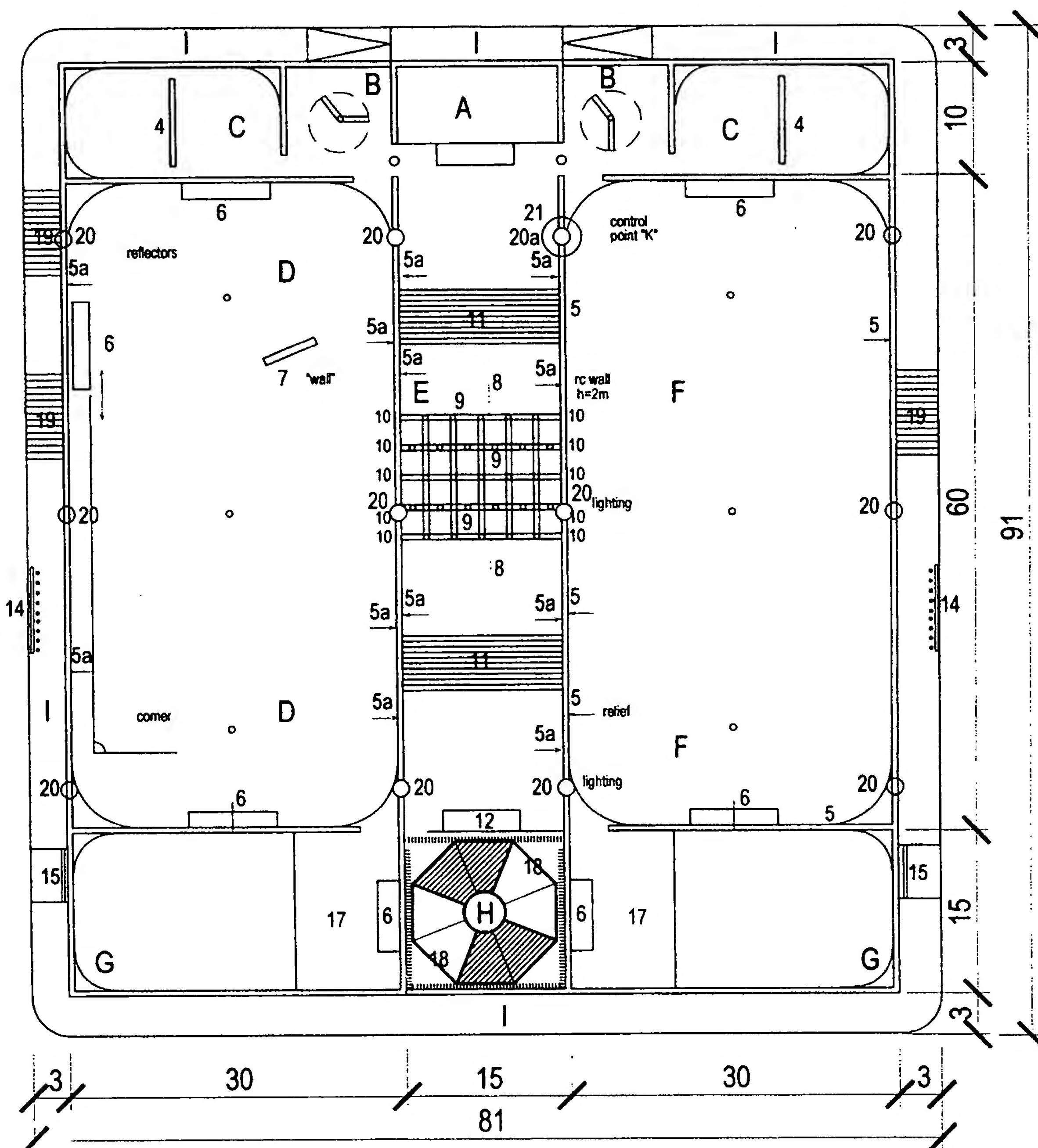
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THE BASE OF THE TRAINING POLYGON

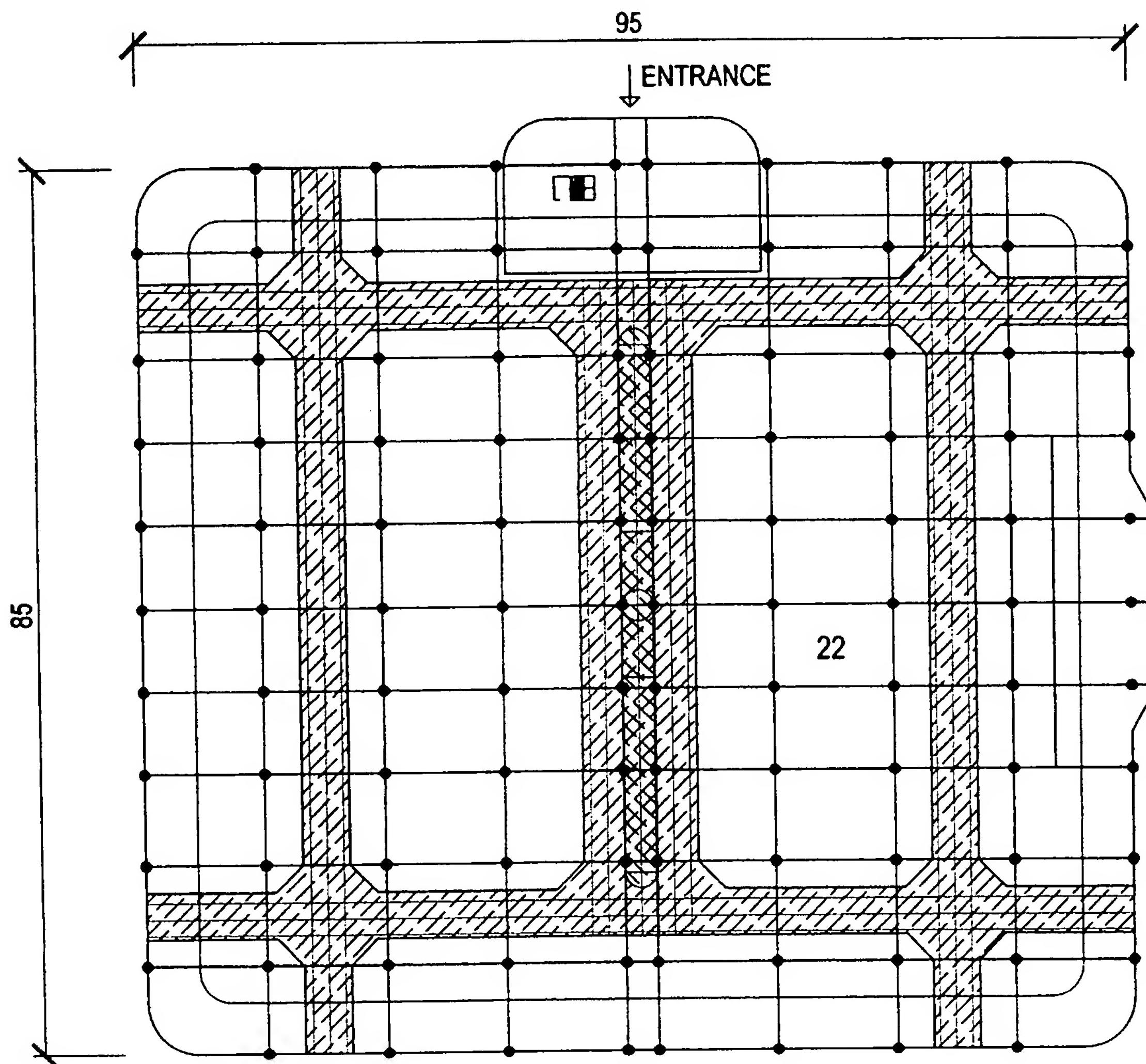
Fig 1

1. A. FITNESS, WEIGHTLIFTING ROOM, LOCKER ROOM, EQUIPMENT PANTRY - CLUB
 2. B. ROTATING OBSTACLES, JUMPING - HANGING BALLS
 3. C. VALLEY BALL (GAME BY FEET) 20x10 m'
 4. D. SMALL FOOTBALL - FREE KICKS 60x30 m'
 5. E. DRIBBLING - PRECISION - TECHNIQUE 60x15 m'
 6. F. SMALL FOOTBALL 60x30 m'
 7. G. GOAL KEEPER TRAINING 30x15 m'
 8. H. SHOTING BOX 15x15x5 m'
 9. I. MARKING 324x3 m'

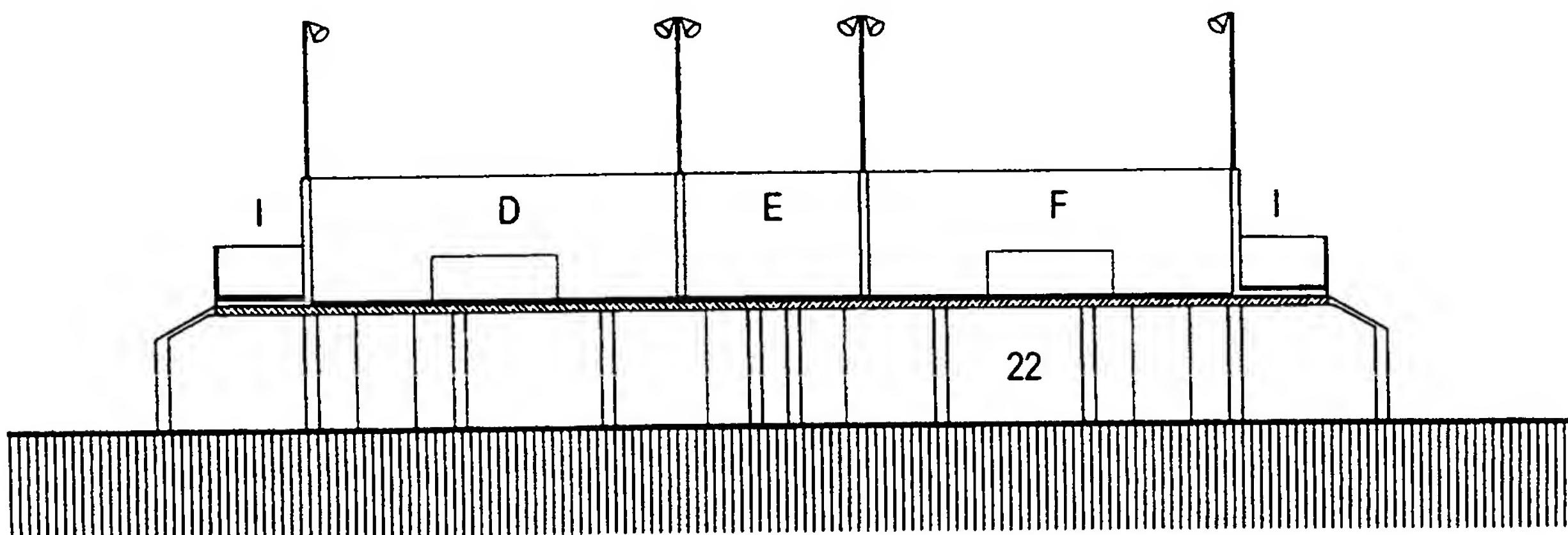


BASE OF BUSINESS FACILITIES
Level ± 0.00

Fig 2

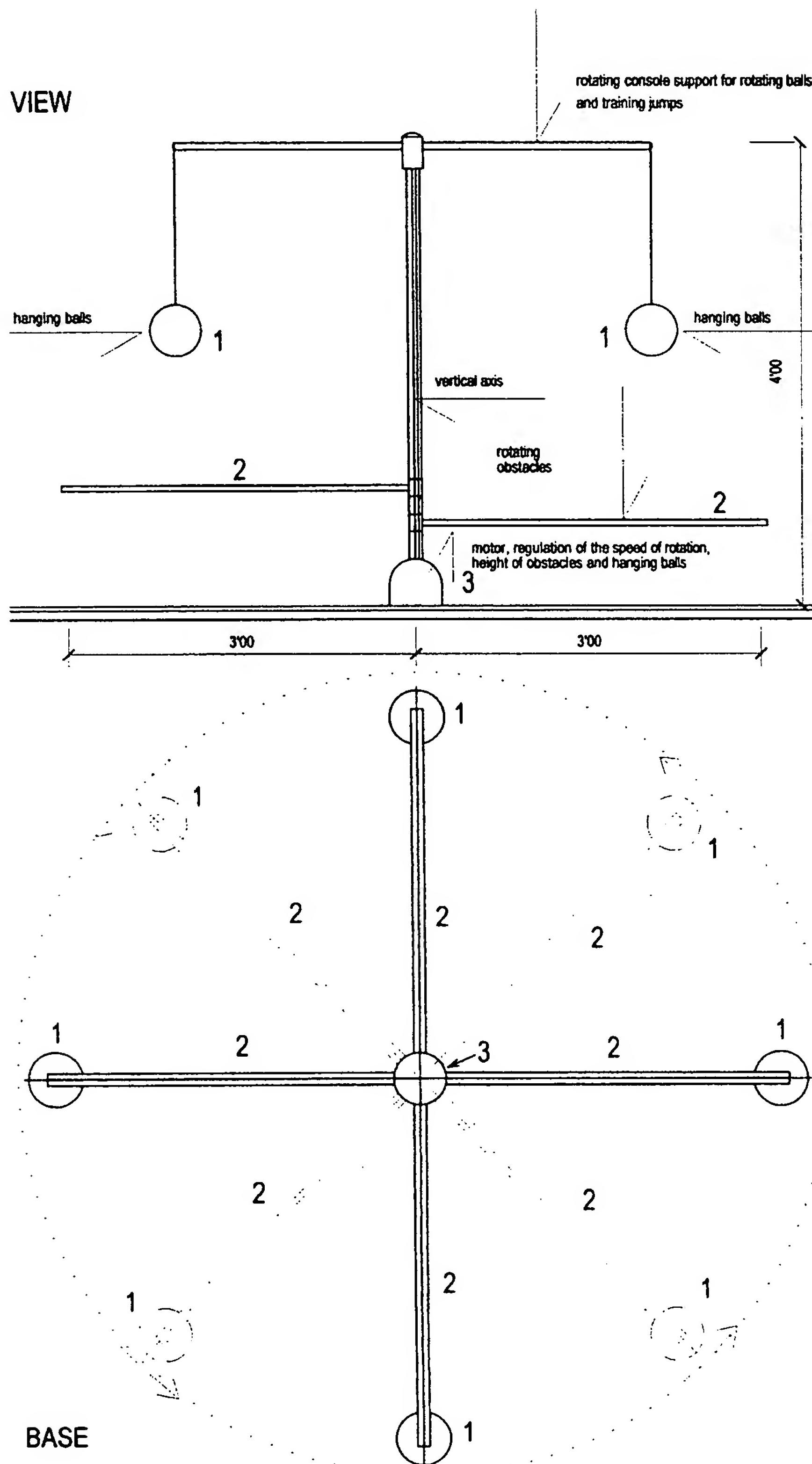


CROSS-SECTION OF THE TRAINING POLYGON Fig 3



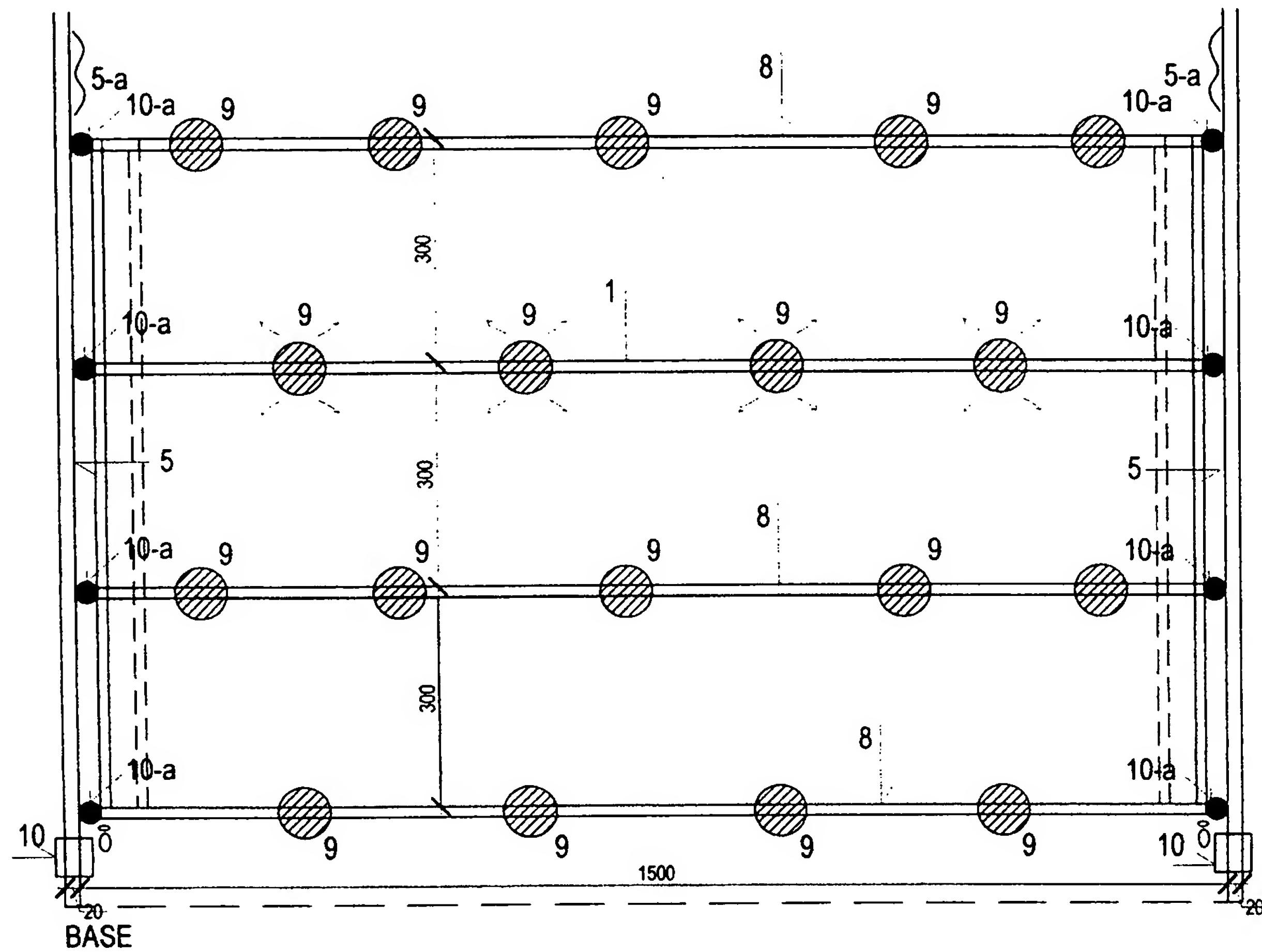
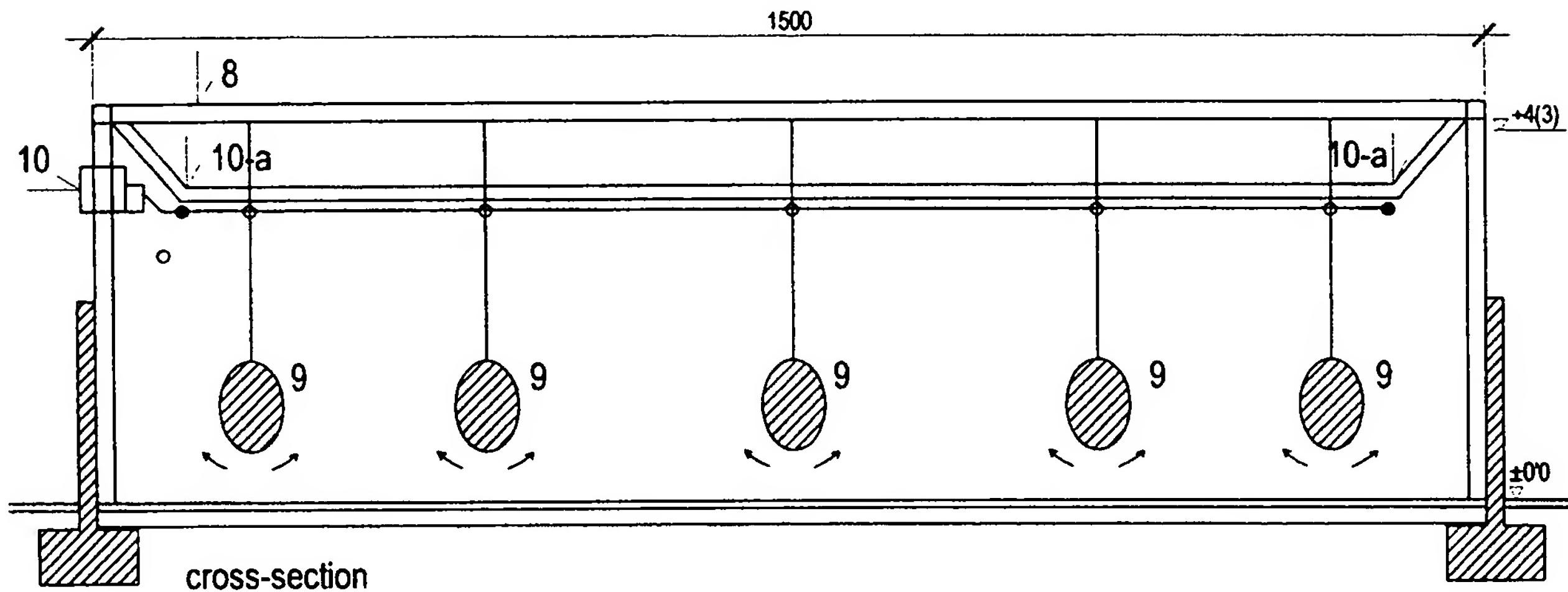
DETAIL OF THE ROTATING OBSTACLES AND HANGING BALLS

Fig 4



DETAIL OF HANGING MOVING OBSTACLES Fig 5

1. GOALPOST SUPPORT - BAR - 8
2. MECHANISM FOR STARTING SWINGING - 10
3. SWINGING OBSTACLES - WEIGHT 80-100 kg UPHOLSTERED - 9
4. MANTINELA WITH RELIEF - 5a
5. MANTINELA - DOUBLE PASS - 5
6. TRANSMISSION FOR SWINGING TRANSMISSION - 10-a



**DETAIL "B"
GOAL WITH LIGHTING FIELDS**

Fig 6

1. GOAL POST _____ 12
2. LIGHTING FIELDS 1-30 _____ 12-a
3. REMOTE CONTROL _____ 16
4. PROTECTION NET _____ 13

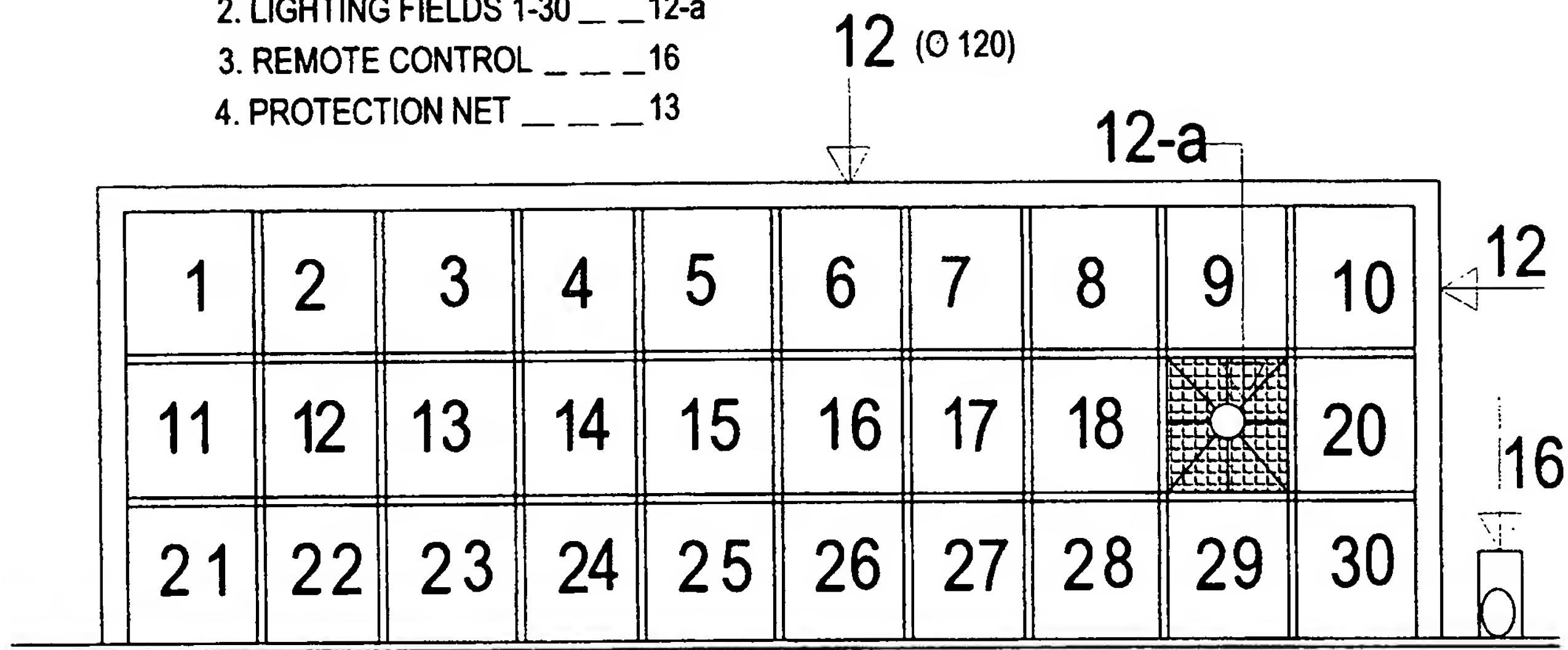
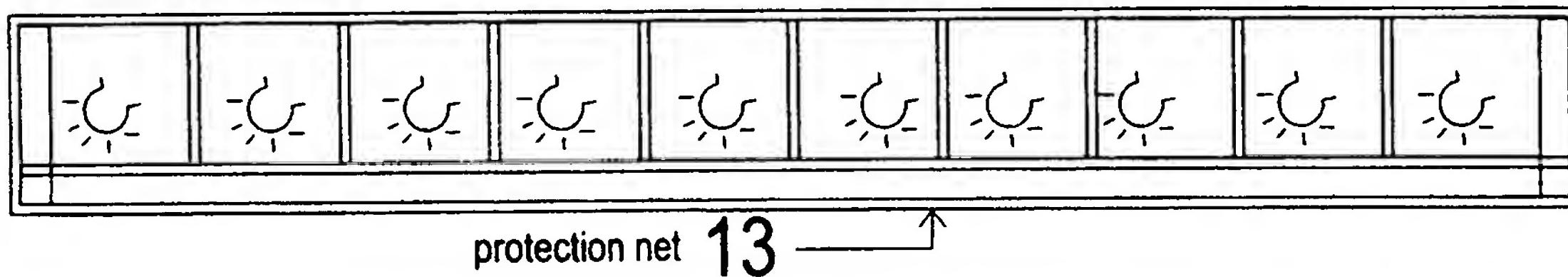
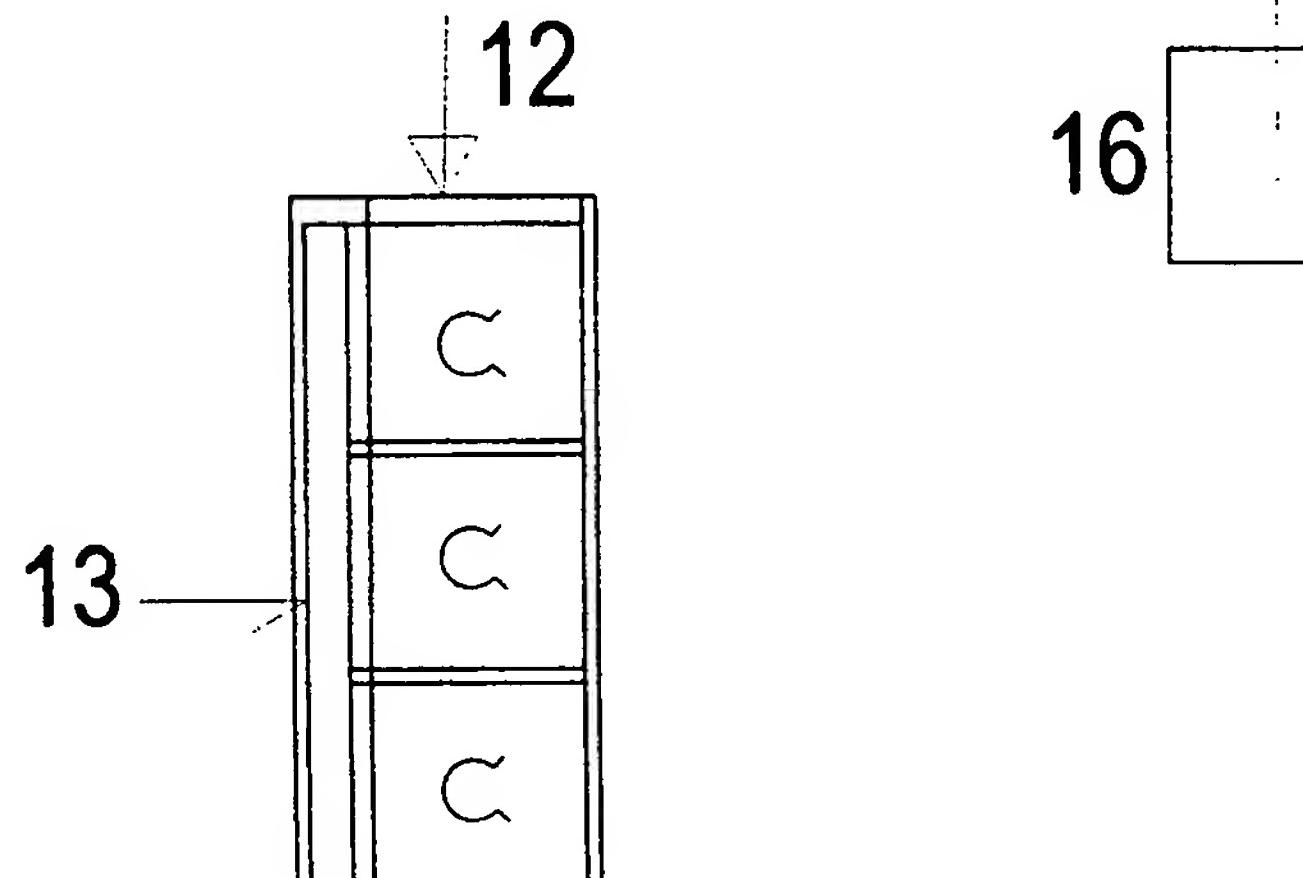
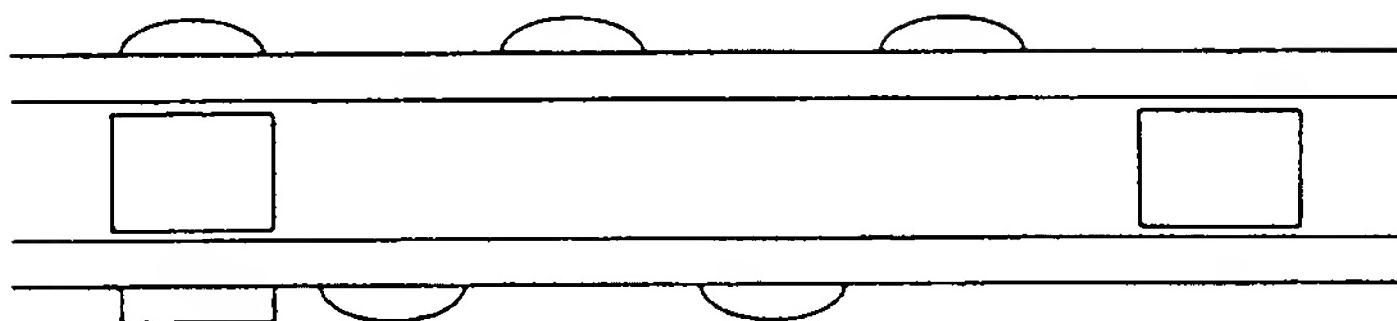
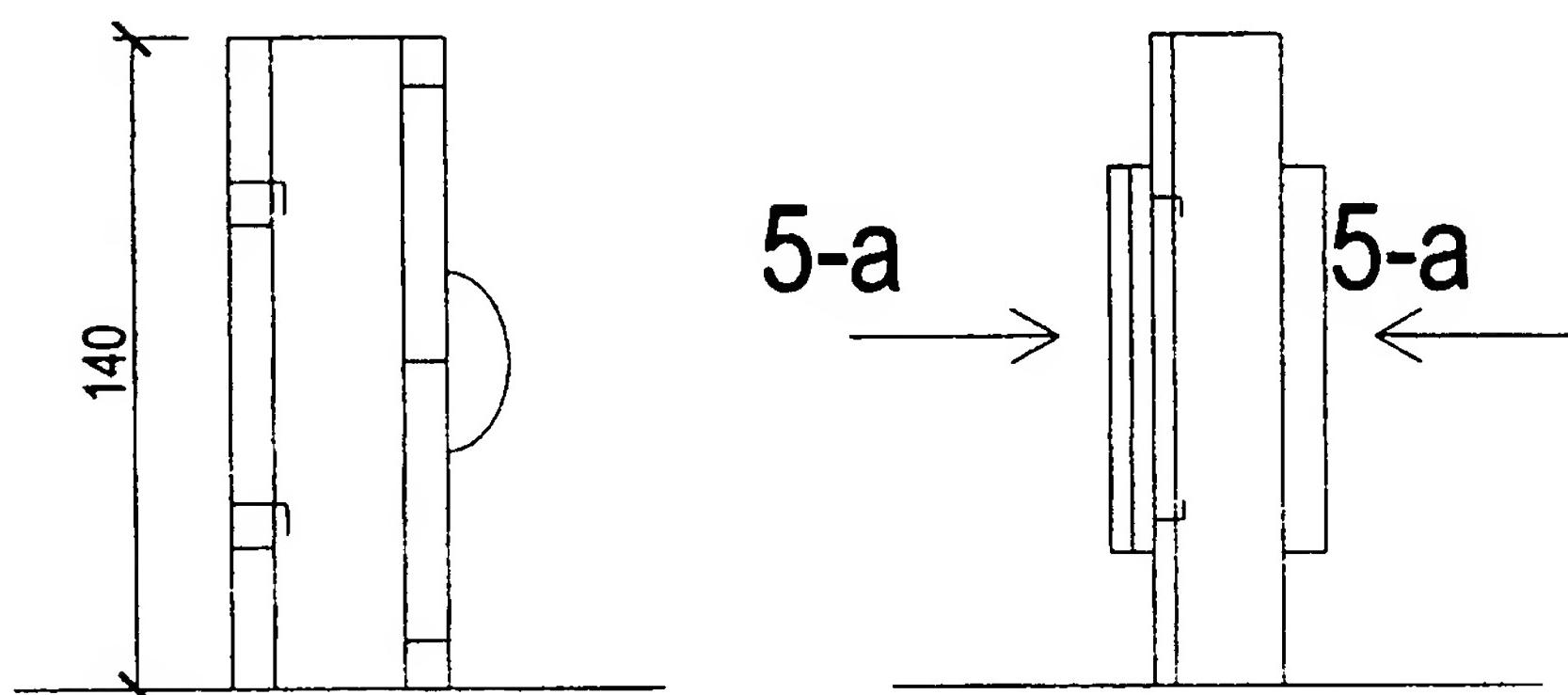
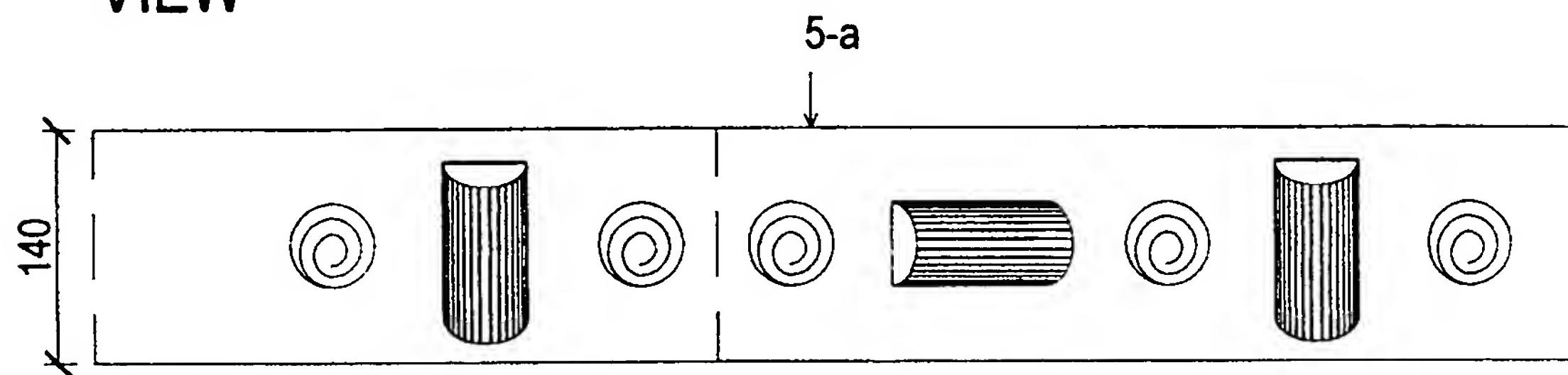
**view****base****cross-section**

Fig 7

**DETAIL
WITH RELIEF 5a****BASE****CROSS-SECTION****VIEW**

**DETAIL
SHOTING BOX**

Fig 8

